

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-25. (Canceled)

26. (New) A mixing apparatus, comprising:

a longitudinal drive shaft;

a drive disc permanently affixed to the drive shaft and provided as a flange extending radially outward from the drive shaft and having a circular periphery with a diameter greater than the diameter of the drive shaft, and having a top flange surface and a bottom flange surface, wherein the drive disc has a plurality of first mounting holes provided in a circular pattern at equally spaced, angular intervals, extending from the top disc surface to the bottom disc surface through the disc;

at least one first blade pair member, the blade pair member having a central mounting portion and two or more impeller blades extending radially outwardly from the central mounting portion, wherein the mounting portion has a plurality of second mounting holes each extending completely through the mounting portion in a circular pattern and arranged in the same pattern as the first mounting holes; and

a plurality of bolts each extending through respective ones of the first and second holes, to affix the mounting portion of the impeller member to the drive disc.

27. (New) The apparatus of claim 25, wherein the drive disc is affixed to the drive shaft by being welded thereto.

28. (New) The apparatus of claim 25, wherein the mounting portion has a central hole therethrough sized to permit the drive shaft to extend through the hole, and wherein the drive disc is located at an intermediate length along the longitudinal length of the drive shaft.

29. (New) The apparatus of claim 27, wherein the mounting portion has a central hole therethrough sized to permit the drive shaft to extend through the hole, and wherein the drive disc is located at an intermediate length along the longitudinal length of the drive shaft.

30. (New) The apparatus of to claim 25, wherein the drive disc is located at an end of the drive shaft, and wherein the blade pair member is mounted to the drive disc on a side of the disc facing away from the end of the drive shaft.

31. (New) The apparatus of to claim 27, wherein the drive disc is located at an end of the drive shaft, and wherein the blade pair member is mounted to the drive disc on a side of the disc facing away from the end of the drive shaft.

32. (New) The apparatus of to claim 26, further comprising a second blade pair member having a structure substantially similar to the first blade pair member, and wherein the bolts extend through holes in the drive disc, the first blade pair member and the second blade pair member.

33. (New) The apparatus of to claim 28, further comprising a second blade pair member having a structure substantially similar to the first blade pair member, and wherein the bolts extend through holes in the drive disc, the first blade pair member and the second blade pair member.

34. (New) The apparatus of to claim 30, further comprising a second blade pair member having a structure substantially similar to the first blade pair member, and wherein the bolts extend through holes in the drive disc, the first blade pair member and the second blade pair member.

35. (New) A mixing apparatus, comprising:

a longitudinal drive shaft;

a drive disc permanently affixed to the drive shaft are provided as a flange extending radially outward from the drive shaft and having a circular periphery with a diameter greater than the diameter of the drive shaft, and having a top flange surface and a bottom flange surface;

at least one first blade pair member, the blade pair member having a central mounting portion and two or more impeller blades extending radially outwardly from the central mounting portion, wherein the mounting portion has a top surface and a bottom surface; and

a plurality of attachment means for attaching the mounting portion of the impeller member to the drive disc, with one of the top mounting portion surface and the bottom mounting surface abutting against one of the top flange surfaces and the bottom flange surface.

36. (New) The apparatus of claim 35, wherein the drive disc is attached to the drive shaft by being welded thereto.

37. (New) The apparatus of claim 35, wherein the mounting portion has a central hole therethrough sized to permit the drive shaft to extend through the hole, and wherein the drive disc is located at an intermediate length along the longitudinal length of the drive shaft.

38. (New) The apparatus of claim 37, wherein the mounting portion has a central hole therethrough sized to permit the drive shaft to extend through the hole, and wherein the drive disc is located at an intermediate length along the longitudinal length of the drive shaft.

39. (New) The apparatus of to claim 35, wherein the drive disc is located at an end of the drive shaft, and wherein the blade pair member is attached to the drive disc on a side of the disc facing away from the end of the drive shaft.

40. (New) The apparatus of to claim 37, wherein the drive disc is located at an end of the shaft, and wherein the blade pair member is attached to the drive disc on a side of the disc facing away from the end of the drive shaft.

41. (New) The apparatus of to claim 36, further comprising a second blade pair member having a structure substantially similar to the first blade pair member, and wherein the attachment means attaches the drive disc, the first blade pair member and the second blade pair member.

42. (New) The apparatus of to claim 38, further comprising a second blade pair member having a structure substantially similar to the first blade pair member, and wherein the attachment means attaches the drive disc, the first blade pair member and the second blade pair member.

43. (New) The apparatus of to claim 40, further comprising a second blade pair member having a structure substantially similar to the first blade pair member, and wherein the attachment means attaches the drive disc, the first blade pair member and the second blade pair member.